DECLARATION OF PROFESSOR JOSHUA SALZMANN

- I, Joshua Salzmann, declare under penalty of perjury that the following is true and correct:
- 1. I have been retained by the Office of the Attorney General of the California Department of Justice to provide expert opinions on the history of passenger transportation in the United States from the Colonial Period to the 21st century, with an emphasis on towns, cities, and settled, urban areas.
- 2. This declaration is based on my own personal knowledge and experience, and if I am called to testify as a witness, I could and would testify competently to the truth of the matters discussed in this declaration.

BACKGROUND AND QUALIFICATIONS

- 3. I am an associate professor in, and the associate chair of, the Department of History and Political Science at Northeastern Illinois University ("NEIU"). I earned my Ph.D. in U.S. History from the University of Illinois at Chicago in 2008. My teaching and scholarship focus on the history of cities, urban economies, public policy, and the built environment. A true and correct copy of my current curriculum vitae is attached as **Exhibit 1** to this declaration.
- 4. I have produced prize-winning scholarship on urban and transportation history. I have published articles in leading peer-reviewed journals, an edited volume of scholarly essays, and several encyclopedias. My book, *Liquid Capital: Making the Chicago Waterfront*, was published by the University of Pennsylvania Press in 2018. *Liquid Capital* examines the political economy of Chicago's waterfront—a crucial site for the transshipment of people, goods, and information—from the late 18th to the 20th century, emphasizing the significance of various forms transportation. My book won prizes for "superior scholarship" from the Illinois State Historical Society, an "Excellence Award" from NEIU, and an "honorable mention" in the Midwest History Association's contest for the best book on the region's history in 2019. My academic research has been supported by

several grants, including an award from the National Endowment for the Humanities.

5. I have presented my scholarship in various other forums, including the web, academic conferences, and invited lectures. In 2020, I created a guide to conducting historical research using Chicago city government documents that won a "best website" prize from the Illinois State Historical Society. I have presented scholarly papers at numerous conferences including the meetings of the: Newberry Library, Urban History Association, Midwest History Association, Illinois History Conference, Missouri Valley History Conference, and Business History Conference. I have also given invited lectures at the Chicago Gun Violence Research Collaborative and the Chicago Maritime Museum—where I serve as a collection consultant.

RETENTION AND COMPENSATION

6. I am being compensated for services performed in the above-entitled case at an hourly rate of \$250. My compensation is not contingent on the results of my analysis or the substance of any testimony.

BASIS FOR OPINIONS, MATERIALS CONSIDERED, AND METHODOLOGY

- 7. The opinions I provide in this declaration are based on my education, expertise, and research in the fields of transportation, urban, and economic history, and my review and analysis of a wide range of primary and secondary sources.
- 8. The analysis I have provided draws primarily on a broad cross-section of peer-reviewed, historical scholarship on transportation, urban, and policy history. The studies I have consulted treat transportation and transportation infrastructure, firstly, as a material and technological artifact, explaining how it worked in a technical sense. Historians of transportation technology do not, however, fall into the trap of "technological determinism," assuming the function of an artifact alone determined how history unfolded. Rather, we also address the question of "how it

9. This declaration is comprised of two parts. The first part of this declaration provides an overview of the history of transportation in America, including a narrative description of the origin of America's public transit systems in the first half of the 20th century. The second part of this declaration addresses historical rules and regulations related to the concealed carrying of weapons on transit systems.

PART ONE: OVERVIEW OF THE HISTORY OF TRANSPORTATION IN THE UNITED STATES

- 10. The American urban landscape is a canvas layered with brushstrokes of human engineering across more than two centuries. From the start of the republic to today, citizens, corporations, and government agencies have collaborated in constructing our nation's infrastructure. They have built, broken, and rebuilt—repeatedly—the streets, waterways, railroads, subways, highways, and airports that disseminate ideas and information, move freight to market, and take people to the places where they worship, work, play, shop, and participate in civic life.
- 11. America's transportation history is defined by a dizzying array of interests and actors—public and private and at all levels, from local to state to federal—sometimes working together and sometimes pulling in opposite directions, each with their own agendas, timeframes, and interests. Transportation has, by turns, been a tool for building the economy, advancing political careers, and doing the nuts and bolts work of nation-building. Above all, transportation is the sector where Americans not only think about—and compete over—what kind of nation

they want to build but spend vast sums of money to translate visions and ideas into on-the-ground realities.

The distinct periods of urban/transportation history in the United States 12. include the Pre-Industrial Era (1600s-1800), The Canal and Early Steamboat Era (1800 to 1830s), the Industrial Railroad City Era (1840s to 1920s), and the Era of Modern Automotive City (1920s to 2020s). This declaration focuses on the first three of these distinct periods.

I. Pre-Industrial Era, 1600s-1800s

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- 13. In 1721, Benjamin Franklin arrived in a quintessential pre-industrial walking city, Philadelphia. Arriving by ship at the city's waterfront, which was cluttered with wharves, warehouses, and taverns, Franklin bought some bread and took a walk through a Philadelphia that had all the hallmarks of pre-industrial settlements: dense populations, rich and poor people living in close proximity to each other, and the blending of living quarters and the workshops of artisans.¹ Franklin also experienced something a bit more novel, the urban grid, which was a product of William Penn's 1681 design. "I went up Market Street as far as Fourth Street..." recalled Franklin. "Then I turned and went down Chestnut Street and part of Walnut Street, eating my role, and coming round, found myself again at Market Street warf." This prosaic experience pointed to several key elements of preindustrial urban transportation: the centrality of the waterfront, dense settlements, and travel by the power of wind and foot.
- Urban geographers have described 18th-century seaports like 14. Philadelphia, New York, Charleston, Boston, and Baltimore as "hinge" cities. With both ocean harbors and rivers penetrating the colonial interior, they functioned as a point for the collection of North American export commodities. Ships laden with

¹ GIDEON SJOBERG, THE PREDINDUSTRIAL CITY (1960).

² JOHN R. STILGOE, COMMON LANDSCAPES OF AMERICA, 1580 to 1845 96 (1982).
³ MOHL AND BILES, THE MAKING OF URBAN AMERICA, *supra*, at 4.

tobacco, grain, rice, fish, furs, wheat, indigo, lumber, livestock, naval stores and minerals sailed from colonial America to Europe and the West Indies. They returned loaded with slaves, tea, sugar, migrants, and British manufactured goods, many of which became politicized during the American Revolution.⁴ To facilitate this Atlantic World "triangular trade," a host of industries cropped up along the waterfront docks: flour milling, brewing, ship building, and rope and barrel making. Urban craftsmen, merchants, and seamen frequently gathered, as Franklin often did, in taverns which became centers of social life and discourse about political rights and trade policy. British officials, meantime, managed and regulated the mercantile economy from administrative offices located in seaport cities. As the historical geographer Carville V. Earle put it, "colonization was unthinkable without them."5 In spite of their economic centrality, those cities were small. Boston's population in 1700 stood at 7,000. New York had 5,000 people, and Philadelphia and Charleston claimed about 2,000 inhabitants. A century later, Boston had grown to 25,000, New York to 60,000, Philadelphia to 62,000, Charleston to 13,000 and Baltimore, a newer city, contained 27,000 people.⁶

15. Colonial and Revolutionary Era Americans lived in a world of wind, wood, human, and animal power. While inventors like Thomas Newcomen and James Watt were developing steam engine technology in the 18th century, it was not widely harnessed for ship and railroad travel until the 1800s. The most common options for long-distance travel included horseback, a small boat, walking, or a wagon—all of which were slow and arduous compared to forms of travel that

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⁴ T.H. BREEN, THE MARKETPLACE OF REVOLUTION: HOW CONSUMER POLITICS SHAPED AMERICAN INDEPENDENCE (2005).

⁵ Earle quoted in MOHL AND BILES, THE MAKING OF URBAN AMERICA, *supra*, at 4.

⁶ Gary B. Nash, The Social Evolution of Preindustrial American Cities, 1700-1820 in the MAKING OF URBAN AMERICA 17-18 (Raymond A. Mohl & Roger Biles eds., 2012).

⁷ MARTIN V. MELOSI, COPING WITH ABUNDANCE: ENERGY AND ENVIRONMENT IN INDUSTRIAL AMERICA (1985).

would emerge in the 19th century. The most expensive options were booking passage on a ship or a stagecoach line. For short-distance travel, well-off people could hire wagons, called "taxis" or "hackneys," to go across town, or they could take their own horses or wagons. Most people, especially those without means, walked. Prior to the 1820s, no city possessed a land-based mass-transit system.⁸

A. <u>City Streets, Natural Roads, and Turnpikes</u>

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- 16. Two distinct models of city street design defined colonial America, one lacking a master plan and the other rationally ordered by a planner. Boston embodied the former style of development. Philadelphia embodied the latter.
- 17. Though Boston was not planned by a single person, New England towns were nonetheless built according to principals that derived from 17th century traditions. The core idea animating this design was that the town was a communal entity and its survival was the paramount concern. An anonymous New Englander articulated these in the 1635 "Ordering of Towns," which proposed that settlements consist of concentric zones within a six-square-mile area with the core consisting of a meetinghouse—for religious and governmental purposes—surrounded by a zone of houses, and then a zone of fields and pastures for commonly-held crops and livestock. At a point when the settlement's survival seemed secure, the common fields and pasture lands were divided among the households and new zones were opened up for settlement by freeholders. Reflecting the centrality of the meetinghouse, most "roads" or public "ways" radiated from the center of the town outward. In its earliest years, Boston reflected this organization with its meetinghouse situated at the center of town life. That changed quickly, however, as Boston became a thriving commercial center. The population grew too large to meet in a single meetinghouse, and Boston's clergy established distinctive churches.

 $^{^{8}}$ KENNETH T. JACKSON, CRABGRASS FRONTIER: THE SUBURBANIZATION OF THE UNITED STATES 33 (1985).

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Meantime, waterfront wharves, built with a combination of public and private money, became spatial foci as crucial to city life as its meetinghouse and churches.⁹

- As it grew quickly, urban development proceeded haphazardly in 18. Boston. In 1666, Boston's selectmen ordered that two "street ways" be laid out to accommodate people. The term "street" was significant because, by the late-16th century it had acquired a distinctive connotation from "road." A street evoked a passageway through a town—a pathway for carts, wagons, and horses—cut through the verticality of abutting buildings and often bordered by pedestrian sidewalks. Streets also promised action, throngs of strangers, and play. An observer of Boston's streets in 1650 noted they were full "of girls and boys sporting up and down, with a continued concourse of people." However, city streets were not always constructed directly by government. Boston, for instance, frequently empowered individuals to construct streets, a practice that was replicated in other cities. The individuals who built the street, in turn, sold off abutting lots. Boston's pattern of development produced a somewhat chaotic urban landscape—with narrow, crooked streets. This pattern of private construction of city streets persisted throughout the 18th century and, in many places, well into the 19th century. 10
- 19. By contrast, William Penn introduced the grid to the English colonies when he laid out Philadelphia in 1681. Penn's grid was not novel. Towns in New Spain, the Spanish colonies in the Americas, were laid out with streets at right angles formed around a central plaza. Penn's Philadelphia, though, centered on the city's two waterfront sites, which he recognized would be crucial for commerce. Penn ordered that no house be built closer to the shore than a quarter mile so that streets and warehouses could be built without difficulty. Nine streets were crossed at right angles by twenty-one other streets. That grid provided order and a framework for city development, and it spurred imitation in many cities, including

⁹ STILGOE, COMMON LANDSCAPES OF AMERICA, *supra*, at 44-48, 91. ¹⁰ STILGOE, COMMON LANDSCAPES OF AMERICA, *supra*, at 49, 90.

- 20. Most people in 18th century America understood "roads" as something that appeared naturally. That is, they appeared by chance rather than planning. They were footpaths, for humans, herds, horses, and occasionally animal-pulled carts (though many roads were too crude for wagons or stagecoaches). Long-distance travelers whose needs were not often factored in the creation of roads often wandered over disparate landscapes trying to piece together the most direct route to their destination. Natural roads were based, instead, on local travel patterns. Footpaths or roads emerged as people traveled common routes: from homes to outlying fields, from farmsteads to nearby wharves, or from settlements to public buildings like the post office or semi-public buildings like stores and taverns. ¹²
- 21. These "natural roads" often traversed or abutted privately owned lands. Although these roads were often located on private property, colonists and early Americans considered the roads to be public ways, and land owners were not allowed to obstruct travel. Not only did land owners have to refrain from blocking the public right of way, they were expected, along with other frequent users, to improve, maintain, and repair roads when they became rutted or overgrown. Sometimes, though, local governments helped with such expenditures, especially as these roads became increasingly critical to communal life in a region over time. ¹³

^{24 11} STILGOE, COMMON LANDSCAPES OF AMERICA, *supra*, at 94-95, 98. On the urban grid see, DAVID HENKIN, CITY READING: WRITTEN WORDS AND PUBLIC SPACES IN ANTEBELLUM AMERICA (1998). One of the most crucial applications of the grid beyond urban areas was the organization of the western territories in accord with the provisions of

the Northwest Ordinance. See, PETER S. ONUF, STATEHOOD AND UNION: A HISTORY OF THE NORTHWEST ORDINANCE (1987).

¹² STILGOE, COMMON LANDSCAPES OF AMERICA, *supra*, at 128-130.

¹³ STILGOE, COMMON LANDSCAPES OF AMERICA, *supra*, at 94-95, 128-130.

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- 22. Many of the long-distance roads in colonial America originated as trails created by Native Americans. Native Americans often walked single-file on paths of about 18 inches in width that followed the contours of the land—hugging rivers or streams and following the easiest gradients over hills and mountains. Over time, Anglo-American travelers used axes to transform these trails into roads wide enough for the passage of horses, oxen, and, sometimes, the carts and wagons those animals pulled. In addition to the improvements of individual travelers, local and colonial governments also allocated money to expand, improve, and sometimes augment the road network. In the 18th century, long-distance country roads were often referred to as "King's Highways" or sometimes "post roads" in recognition of their use by the horseback riders who carried the mail. 14 After the Revolution, many of the new states worked to expand the road network for purposes of passenger travel and carrying the mail. In 1783, New York, for example, established a post road from Albany to Schenectady, and 1785-1786 Pennsylvania passed laws for the construction of roads to the interior, but a key problem remained—the United States was rich in land and lacking in capital—and its roads tended to be poor. 15 23. European travelers often remarked on the terrible condition of the
- 23. European travelers often remarked on the terrible condition of the roads. Englishman Hugh Finlay recorded his observations of the roads used by postal couriers along the Atlantic Coast from Canada to South Carolina in 1773 and 1774. Finlay found them uniformly lacking for the purpose: "The road is one continued bed of rocks, and very hilly," he said of a road in Connecticut. "It is impossible for a Post to ride above four miles an hour on such road...."
- 24. As Finlay's emphasis on postal service suggests, the question of transportation was not just a matter of the movement of people and goods but also

¹⁶ Finlay quoted in STILGOE, COMMON LANDSCAPES OF AMERICA, *supra*, at 128-130.

 $^{^{14}}$ WILLIAM CHAUNCY LANGDON, EVERYDAY THINGS IN AMERICAN LIFE 1607-1776 241-242, 245-246 (1937).

¹⁵ HENRY MEYER, HISTORY OF TRANSPORTATION IN THE UNITED STATES BEFORE 1860 51 (1948).

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of ideas and information essential to representative government. The issue of communications preoccupied the founders of the United States. Anti-Federalists, who opposed the creation of a strong federal government and the ratification of the 1787 Constitution, argued that the physical size of the United States would make it impossible to govern as a single nation. In rebuttal, James Madison's 1787 *Federalist 14* argued that under the proposed Constitution "intercourse throughout the union will be daily facilitated by new improvements," such as roads and canals that could facilitate communication between citizens and their elected leaders. ¹⁷

25. While Congress was considering the merits of spending on internal improvements, many roads in the early republic were being built by corporations chartered by state governments that lacked money for construction. Those privately-built roads were commonly called "turnpikes," a term that has become synonymous with toll roads. The turnpike's name derives from the type of gate used to regulate access to the toll road. The "turnpike" consisted of four poles mounted horizontally on a vertical axis—like a turn style. The person who pushed the pole to gain access to the road closed the next pike behind. The roads were constructed by states and, mostly, by private companies. In 1785, Virginia opened the nation's first toll road leading to the town of Alexandria, and in 1794 The Philadelphia and Lancaster Turnpike Company—which was chartered by the state—opened a road of crushed stone interrupted by nine toll collection gates. Turnpike companies set the price of travel by the value and damage caused by the load. Pedestrians paid little. A horseback rider paid more. Sheep and cattle herders paid by the head. Carriages and wagons paid according to the value of the contents of their cargo. These roads were common from Maine to Georgia. The profitseeking companies that built turnpikes often did so on the cheap by creating steep

¹⁷ Madison quoted in STILGOE, COMMON LANDSCAPES OF AMERICA, *supra*, at 107.

gradients and experimenting to find the cheapest surfaces, and people frequently complained of their deep holes and ruts.¹⁸

B. Wagons and Stagecoaches

- 26. One consequence of the poor condition of the roads in colonial and Revolutionary-Era America, travel by stagecoaches or wagon could be difficult. Horseback or foot was the most common method of transport on land. When people did travel by carriage or wagon, the experience was often nerve-wracking, as one European traveler, Brissot de Warville, noted of his journey on the Boston Post Road in 1788: "I know not which to admire most in the driver, his intrepidity or dexterity. I cannot conceive of how he avoided dashing the carriage to pieces and how his horses could retain themselves in descending the staircase of rocks." ¹⁹
- 27. In addition to poor road quality, there were economic constraints on carriage and wagon travel. Most colonial Americans could not afford a carriage. As two historians of stagecoaches put it, the "working class in towns and cities had no carriages at all. Except for a few southern planters, the country people, who overwhelmingly predominated the population, did not purchase them until after 1800, and even then, they did not own carriages in significant numbers until the mass-produced vehicle was introduced in the 1870s." During the 18th century then, most carriages were concentrated in the hands of well-to-do residents of seaport cities. The case of Massachusetts is illustrative. According to 1753 tax records, the entire colony contained just 6 coaches. Massachusetts also had 18 chariots, 339 chaises, and 992 chairs and calashes—the vast majority of which were located in Boston. Carriage ownership was a rarity.²⁰

¹⁸ STILGOE, COMMON LANDSCAPES OF AMERICA, *supra*, at 112-115.

¹⁹ WILLIAM CHAUNCY LANGDON, EVERYDAY THÍNGS ÍN AMERICAN LIFE 1607-1776 249 (1937).

²⁰ OLIVÈR W. HOLMES AND PETER T. ROHRBACH, STAGECOACH EAST: STAGECOACH DAYS IN THE EAST FROM THE COLONIAL PERIOD TO THE CIVIL WAR 5-6 (1983).

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29. Stagecoaches became crucial to the business of the new nation after the Revolutionary War. Starting in 1785, Congress voted to contract with stagecoaches for carrying the mail. At that time, the U.S. mail was the primary means of long-distance communication as well as of circulating checks, bank notes, and legal and business documents. The stagecoach thus became the lifeblood of the nation's economy. Reflecting its connection to the U.S. mail, most of the stagecoach routes were located along the Main Post Road that ran from the State of Maine to Georgia. In 1790, 51 of the nation's 200 post offices were also situated on that route. Mail contracts could be quite lucrative for stagecoach operators. One stage line, for instance, got a \$1,333 annual contract in 1792 to carry mail between Philadelphia and New York five times per week.²²

²¹ HOLMES AND ROHRBACH, STAGECOACH EAST, *supra*, *at* 6, 14. ²² HOLMES AND ROHRBACH, STAGECOACH EAST, *supra*, at 2, 15, 25, 37.

- 30. The Post Office was so crucial to the stagecoach industry that it even started to dictate how the coaches should be built. Early stagecoaches were not always covered and did not necessarily have locking compartments or lamps, but those features eventually became synonymous with the carriages because of the Post Office. Postmaster General Joseph Habersham (who served from 1795 to 1801) specified how he wanted stagecoaches to be designed, telling a stagecoach operator: "I wish you to employ some carriage maker at Newark to build a four horse stage with harness and two Lamps complete as soon as possible. The stage is intended to carry tow of our largest mails within its body and six passengers. At each end, within the body, is to be built a chest of box equal to 22 inches square and as long as the width of the stage will admit. The lids of the chest are to be covered in the same manner as the seats usually are, and it is intended they would be used for that purpose: the passengers who sit on the fore seat will set with their backs to the horses...."²³
- 31. Stagecoach lines were an expensive option for passenger travel, and they mainly catered to the wealthy. A Stagecoach often carried about half a dozen people. Frequent stagecoach users included foreign travelers, merchants, bankers, and real-estate speculators. Travel on bumpy roads was uncomfortable and the fares were high, but the trips were relatively fast due to the frequent changing of the horse teams at different stages of the journey. Another benefit, stage lines steered travelers unfamiliar with their surroundings to taverns and inns where they could get decent meals and rent sleeping quarters. Except in cases of bad weather, travel schedules and stops were routine. "The Flying Stage Coach," for instance, left Philadelphia at 4:00 AM, stopped for breakfast in Bristol and for dinner in Princeton before it reached its terminus in Elizabeth, NJ at nighttime. Passengers

²³ HOLMES AND ROHRBACH, STAGECOACH EAST, *supra*, at 40-43.

shelled out \$4 for the ride from Philadelphia to Elizabeth, but in the spring of 1783 The Flying Stage raised the price to \$6, citing the rising costs of oats and hay.²⁴

C. <u>Ferries and Ships</u>

- 32. Ferries became fixtures of colonial American infrastructure from the early days of colonization. Private entrepreneurs established ferries with the sanction of local governing bodies at sites frequently named for the operator. Harper's Ferry, WV and Harrisburg, PA, for instance, are named after men (Robert Harper and John Harris) who established ferries across the Potomac and Susquehanna Rivers in the 18th century. The permission to establish a ferry often came with various stipulations from government authorities including fees, assurances the operator would provide consistent service, and an agreement about the toll travelers had to pay. These agreements go back to early days of British colonization. In 1630, for example, the Massachusetts Bay Colony awarded a charter to Edward Converse to operate a ferry between Boston and Charlestown. Converse had to pay a 40 pounds sterling fee each year, and he was required to keep two boats, one on each side of the river, and charge a rate of no more than three pence for pedestrians.²⁵
- 33. Colonial-era ferries were propelled by human, animal, and wind power and seldom provided the type of rapid, consistent service that became common with steam ferries in the 19th century. Human power was often used for the various types of ferries that transported pedestrians. Ferry operators used small boats that could be rowed, paddled, or poled across the water. Larger vessels were rowed by two or four oarsmen; sometimes passengers joined the rowing crew. To propel ferries carrying heavy horses or oxen, operators usually harnessed wind power. A sailing scow on the Boston-Winnisimmett route, for example, carried up to 20 horses, making the three-mile journey in 1 to 2 hours. To cross rivers with fast

²⁴ HOLMES AND ROHRBACH, STAGECOACH EAST, supra, at 16, 43, 56.

²⁵ JOHN PERRY, AMERICAN FERRYBOATS, supra, at 9-10, 28.

currents, ferry operators often used a rope or wire ferry. In the waters surrounding Manhattan, 18th century ferry operators frequently used a barge-like sailing craft called a "periauger." In good conditions, the crossing was smooth, but wind and currents could blow it off course. Sometimes a periauger had to land on Governor's Island and its passengers and crew had to regroup for the journey to Manhattan when the conditions improved. When heavy cattle were loaded onto a boat, the danger of capsizing in bad weather was much greater. People who wished to ferry cattle from Long Island to Manhattan sometimes waited for several days for good weather before risking the ferry trip. Bad weather could strike anytime, however. In April 1798, a periauger sailing from Brooklyn sank in a sudden squall, claiming the lives of seven people and five fat oxen.²⁶

- 34. Even in good weather, a traveler going to a major city like Philadelphia, New York, or Boston by ferry might have to wait an hour of two for a boat. Given the irregularity and slow speed of service, many travelers stopped for food, rest, and fun at the sites of ferry crossings. While they waited, travelers often availed themselves of services provided in the "ferry house," an often-boisterous combination of tavern, hotel, restaurant, and stable, usually run by the ferry operator. In 1781, the Brooklyn ferry house, for example, boasted: "Breakfasting and Relishes;" fox hunts and races; and even a lottery. Some ferry operators even found the boat to be something of a nuisance. The act of taking passengers across the water could be deadly. Meantime, the business of feeding and boarding travelers was less dangerous and often more lucrative.²⁷
- 35. Much like ferries and stagecoaches, ocean-going vessels carried both freight and passengers. Until the 19th century, however, carrying freight was the primary purpose of most of the vessels that plied the Atlantic. Passengers were a secondary business, and their comfort was often of little concern. Ships, moreover,

²⁶ JOHN PERRY, AMERICAN FERRYBOATS, supra, at 30-32.

²⁷ PERRY, AMERICAN FERRYBOATS, supra, at 38, 42.

did not generally sail on regular schedules that passengers could count on until well-into the 19th century. Instead, they departed when they had a cargo in need of transport. Not only was the schedule contingent on freight, it also depended on weather conditions. Travel times were irregular. There were two types of trade, a transoceanic and a coastwise trade, in which ships traveled along the Atlantic seaboard dispersing goods from the colonies and, later, the states.²⁸

36. Much of the infrastructure for sailing ships was created by private parties, but public officials took charge of lighthouses because they were so critical for safety. In New York, Boston, and other port cities, local governing bodies often granted or leased waterfront spaces to private parties to build and operate docks and wharves.²⁹ In 1716, Boston constructed the first colonial lighthouse, a 60-foot structure on Little Brewster Island. Eleven other lighthouses followed, including the imposing 103-foot lighthouse at Sandy Hook built by the New York legislature in 1764. The new federal government assumed control of these locally-constructed lighthouses by a 1789 act of Congress. These structures were so important to navigation that Revolutionary-era politicians insisted on careful lighthouse design and meticulous regulation. President Thomas Jefferson remarked: "The keepers of lighthouses should be dismissed for small degrees of remissness because of the calamities which even these produce." Through the Lighthouse Service, the federal government began building more. By 1817, 55 lighthouses dotted the shores of the United States. These structures signaled the growing power of the national government.30

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30 STILGOE, COMMON LANDSCAPES OF AMERICA, *supra*, at 110-111.

SHIP: AMERICA'S MARITIME HISTORY REENVISIONED, 1600-2000 69 (2008).

²⁹ HENDRIK HARTOG, PUBLIC PROPERTY AND PRIVATE POWER: THE

CORPORATION OF THE CITY OF NEW YORK IN AMERICAN LAW, 1730-1870 44-59

²⁸ ALEX ROLAND, W. JEFFREY BOLSTER, and ALEX KEYSSAR, WAY OF THE

II. The Canal and Early Steamboat Era, 1800-1830s

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37. In 1808, Secretary of the Treasury Albert Gallatin made one of the most forceful arguments for internal improvements to date, adding an economic rationale to political and military security arguments. Gallatin penned his Report on Roads and Canals at the request of the Senate. The problem of conducting government business over vast expanses had been magnified by Thomas Jefferson 1803 Louisiana Purchase, which had more than doubled the nation's territory.³¹ Gallatin said, "Good roads and canals will shorten distances, facilitate commercial and personal intercourse, and unite, by a still more intimate community of interests, the most remote quarters of the United States." Gallatin called on the government to build an extensive network of roads and canals financed by the sale of public lands: "No other single operation within the power of Government, can more effectually trend to strengthen and perpetuate that Union which secured external independence, domestic peace, and internal liberty."32 Between 1811 and 1837, Congress constructed the first highway built by the federal government. The "National Road," with a surface of crushed stone, ran from Cumberland, MD to Vandalia, IL. 33

38. Gallatin's ambitious plans for internal improvements, however, went unrealized because there was a robust debate over spending federal money on internal improvements in the early republic and antebellum eras. Some lawmakers questioned whether Article One, Section Eight of the Constitution granted Congress the power to build roads or merely establish rights of way. What was really at stake in the quibbling, though, was a deeper issue. Many lawmakers and voters did not

³¹ JOHN KUKLA, A WILDERNESS SO IMMENSE: THE LOUISIANA PURCHASE AND THE DESTINY OF AMERICA (2004).

³² Gallatin quoted in STILGOE, COMMON LANDSCAPES OF AMERICA, *supra*, at 108.

 $^{^{\}rm 33}$ ROGER PICKENPAUGH, AMERICA'S FIRST INTERSTATE: THE NATIONAL ROAD, 1806-1853 (2020).

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think in national terms, and they did not see why they should pay for far-away projects that presumably benefitted people elsewhere.³⁴

- This vision was also informed by a political tradition of localism and 39. antipathy to federal power embodied in the "Jacksonian Democracy" of the 1830s. The debate followed from Revolutionary-era discussions over federal power. The Maysville Road veto offers a case in point. In 1830, Jackson had denied federal funding to build a road between Maysville and Lexington, KY, the home of political rival Henry Clay, on the basis that the project was of a "purely local character." Jackson's veto rejected the integrated approach to internal improvements championed by Whigs such as Clay. Rooted in a Hamiltonian vision of centralized government and economic institutions, Clay's "American System" advocated funding internal improvements that, even if confined within one state, would function as parts of an integrated, national transportation network.³⁵ The first shipping company to offer regularly scheduled passenger service—and to make passenger comfort a selling point—between New York and Europe was the Black Ball Line. Its first ship, the *Courier*, departed from New York on January 5, 1818 loaded with seven passengers, mail, and a cargo of apples, flour, ashes, and cotton. The line offered 12 round trips per year, and the trip averaged 22 to 25 days going east and 33 to 48 days returning to New York. 36 The length and cost of travel was so great that when working class people traveled from Europe to the United States on a sailing ship, they seldom returned.³⁷
- 40. Canals also rose in prominence during this period. Robert Fulton pointed out the economic benefits of canal construction in his 1796 Treatise on the

³⁷ Raymond L. Cohn, *The Transition from Sail to Steam in Immigration to the United States*, 65 THE JOURNAL OF ECONOMIC HISTORY 469 (2005).

³⁴ STILGOE, COMMON LANDSCAPES OF AMERICA, *supra*, at 108-109.

³⁵ JOHN LAURITZ LARSON, INTERNAL IMPROVEMENT: NATIONAL PUBLIC WORKS AND THE PROMISE OF POPULAR GOVERNMENT IN THE EARLY UNITED STATES 182-184 (2001)

³⁶ ALEX ROLAND, W. JEFFREY BOLSTER, and ALEX KEYSSAR, WAY OF THE SHIP: AMERICA'S MARITIME HISTORY REENVISIONED, 1600-2000 161-162 (2008).

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Improvement of Canal Navigation. "Would not the lands around Fort Pitt be as valuable as those around Lancaster," Fulton asked, "if the produce could be brought to market for the same sum?" Fulton knew that a canal would drive freight rates lower. He also had a personal stake in navigation. As an engineer avidly working on ways to improve navigation, Fulton eventually developed the first commercially viable steamboat. Many river boats at the time were "keelboats" that could be floated along the current, rowed, or pushed along the bottom with large poles. Some boats were pulled upriver by animals on a towpath. Fulton, though, was working to propel boats with steam engines. In 1807, he and Robert Livingston took their steamboat, Clermont, from New York City upriver to Albany and back, 300 miles, in just 62 hours. Even though travel was so fast, most riverboat men at the time dismissed the steamboat as "a mere plaything" ill-suited to carrying freight because the engines took up so much space. Few people objected when the New York legislature granted Fulton and Livingston a monopoly on Hudson River steam transport, but this was short sighted.³⁸ The application of steam power to water travel opened up new possibilities for going against the current. Advances in boat design quickly made the steamboat industry commercially viable on rivers, though not on the oceans until mid-century. ³⁹ Powered by steam, riverboats plied the waters of the nation's rivers throughout the 19th century, carrying passengers and freight in numbers and tons that would have been unimaginable in the canoes and flatboats that people had once used their muscles, as well as animals on towpaths, to propel upriver.

41. The steamboat transformed freight and passenger shipping along the nation's great rivers. It also spurred urban growth in the Mississippi River Valley. From the 1820s to the 1840s, the steamboat was the second leading investment sector in the region after slaves and land. There were 17 steamboats on western

³⁸ MICHAEL HILTZIK, IRON EMPIRES: ROBBER BARONS, RAILROADS, AND THE MAKING OF MODERN AMERICA 4 (2020).

³⁹ ROLAND, BOLSTER, and KEYSSAR, WAY OF THE SHIP, *supra*, at 161-162.

rivers in 1817, and by 1847 that number had increased to over 700 steamboats carrying slaves, free passengers, and lots of cotton at speeds of 5 to 8 miles per hour. River cities like Cincinnati, St. Louis, and New Orleans grew up with the increase of riverboat traffic. In 1810, New Orleans, for instance, had a population of 17,000. A decade later there were about 200 steamboats arriving in New Orleans. By 1860, that figure had grown to 3,500, and New Orleans contained about 170,000 residents, representing a ten-fold increase over the previous 50 years. The riverboat industry, meantime, started to decline by the middle of the 19th century. Competition from railroads hurt steamboats as did the competition between river lines. Since all steamboat operators had to operate on a limited number of navigable rivers, they tried to capture passenger traffic by running their boats as fast as possible—often leading to deadly steam-engine explosions. Long distance steamboat travel declined throughout the 19th century, but short-distance steam ferries continued to thrive in many metropolitan areas.⁴⁰

42. Ferry boats were the nation's first urban mass transit. Cities marked by a geography that facilitated shipping—places with islands, deep bays, and rivers—often faced geographic limits on residential development, making ferries necessary. Sail and human and animal-powered ferries were in use dating back to the days before the American Revolution, but steam-powered boats supplanted them and made the service more dependable and widely used. In the 1810s, Robert Fulton established steam-powered ferry service linking Manhattan with New Jersey and Brooklyn. Ferry service enabled the middle and upper middle-class people who could afford fare to move out of the city's periphery and commute to its central business district. Brooklyn, New York was the first and most significant of the modern "ferry suburbs," but water transportation was also crucial for residents of towns in New Jersey like Hoboken and Jersey City. Metro New York had the

 $^{^{40}}$ Walter Johnson, River of Dark Dreams: Slavery and Empire in the Cotton Kingdom 5-8 (2013).

greatest number of ferry companies and passengers. By 1860, New York City had 13 ferry companies running twenty different routes and a total annual ridership of 32 million, and by 1870 there were about 50 million annual passengers. Commuters also used ferries in other metro areas to travel between Philadelphia, PA and Camden, NJ; Newport, KY and Cincinnati, OH; Pittsburgh, PA and Allegheny City, PA; Boston and Noodle's Island and East Boston, MA; and San Francisco and Oakland, CA.⁴¹

- 43. The early history of ferry steamboat travel in the New York City region raised a critical question of the regulation of interstate commerce. By the 1820s, Thomas Gibbons and his partner Cornelius Vanderbilt were challenging the monopoly by both illegal and legal means. Gibbons acquired a license to compete with Hudson River steamboat operators from the federal government, culminating in a case to determine whether the State of New York or the federal government had the power to regulate commerce.
- 44. As Robert Fulton had anticipated, water navigation and economic development in the interior of the U.S. demanded the construction of canals. The "hinge" cities of the seaboard could only gather and export as many commodities from the North American interior as were accessible by roads or rivers. The rivers that ran inland from Charleston, Baltimore, Philadelphia, and Boston all ran into mountains that could not easily be traversed. New York City's geography, though, presented an exception. The Hudson led north to Albany where there was a pass in the mountains that extended along the Mohawk River and through low-lying land all the way west to Lake Erie. New York State legislators frustrated by Congressional wrangling—especially opposition to federally funded internal improvements—authorized the construction of a canal through this route. Constructed between 1817 and 1825, the Erie Canal was a forty-feet-wide, four-foot-deep waterway—later expanded—that stretched 363 miles from Albany on the

⁴¹ JACKSON, CRABGRASS FRONTIER, supra, at 28, 32-33.

Declaration of Joshua Salzmann (Case Nos. 8:23-cv-01696 and 8:23-cv-01798)

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Hudson to Buffalo on Lake Erie. Canal boats were towed along by mules walking on the abutting towpath. At 34 different locations, the boats entered locks, which were filled or drained with water to raise or lower the canal boat as it changed elevation. Canal boats carried freight and passengers alike and paid tolls along the way. With the completion of the Erie Canal, there was a water route all the way across the western-most Great Lakes, Superior and Michigan, to New York City on the Atlantic. Now the agricultural products, timber, and minerals of the North American interior could be shipped to New York.⁴²

45. Inspired by New York's Erie Canal, many states launched canal projects. Some of the most ambitious ones occurred in Midwestern states like Ohio, Indiana, and Illinois. In 1832, Ohio completed a canal between Lake Erie and the Ohio River, and its tremendous success galvanized political support for new public works projects. In 1837, the state legislature passed a Loan Law that virtually required the state to match private investment in internal improvements. Hoosiers, meanwhile, started building a "Mammoth System" of railroads, canals, and turnpikes. The State of Illinois, in turn, began building the Illinois and Michigan Canal to link Chicago on the shore of Lake Michigan to the Illinois River, which flowed into the Mississippi. These projects ground to a halt after the Panic of 1837 struck, state revenues sagged, and borrowing costs soared. Indiana defaulted on its debts, having built just 281 miles of its proposed 1,289-mile transportation system. Ohio and Illinois narrowly avoided bankruptcy—and managed to complete their canal systems—because New York City investors bailed them out. It was in New Yorkers' economic interest to help funnel goods from the North American interior through Midwestern canals into the Great Lakes, across the Erie Canal, and into the

⁴² JOHN LAURITZ LARSON, INTERNAL IMPROVEMENT: NATIONAL PUBLIC WORKS AND THE PROMISE OF POPULAR GOVERNMENT IN THE EARLY UNITED STATES 71 (2001); JOSHUA A.T. SALZMANN, LIQUID CAPITAL; MAKING THE CHICAGO WATERFRONT (2018).

waiting arms of New York City. 43 By 1838, the U.S. boasted 2,700 miles of canals. 44

A new economic geography began to take shape in the first half of the 46. nineteenth century with the expansion of steamboat and canal travel. In addition to the seaport "hinge" cities importing and exporting goods to the Atlantic World, the United States developed its own national economic market between the 1820s and 1850s: the cotton kingdom in the South; an agricultural empire in the West—now Midwest; and nascent industrial development with the rise of textile production in the Northeast. 45 New York City—with an Atlantic seaport, industry, and water connection to the interior—became the nation's "primate city." Its population rose from 33,000 in 1790 to 813,000 by 1860. Philadelphia grew from 28,000 to 565,000 in the same years, and Baltimore and Boston increased to more than 265,000. In addition to the growth of the seaport cities, two new networks of cities blossomed across the nation's key interior waterways. Along the Ohio and Mississippi River, cities like Pittsburgh, Louisville, Cincinnati, Saint Louis, and New Orleans became important regional shipping, marketing, and manufacturing centers. On the Great Lakes, meantime, Buffalo, Cleveland, Detroit, Milwaukee, and especially Chicago became centers of trade in agricultural commodities. 46 The growing prosperity of farmers in rural America created demand for new types of industrial production—and with it a new type of city.⁴⁷

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⁴³ SALZMANN, LIQUID CAPITAL, supra, at 18-19.

 ⁴⁴ STILGOE, COMMON LANDSCAPES OF AMERICA, supra, at 115.
 45 WALTER LICHT, INDUSTRIALIZING AMERICA: THE NINETEENTH

CENTURY (1995); SVEN BECKERT, EMPIRE OF COTTON: A GLOBAL HISTORY (2015).

46 MOHL AND BILES, THE MAKING OF URBAN AMERICA, *supra*, at 121.

⁴⁷ DAVID R. MEYER, THE ROOTS OF AMERICAN INDUSTRIALIZATION (2003); WILLIAM CRONON, NATURE'S METROPOLIS: CHICAGO AND THE GREAT WEST (1991).

III. The Industrial Railroad City Era, 1840s to 1920s

A. Railroads

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Few technologies were more critical to industrial production, and to 47. life in the industrial city, than the railroad. 48 The astonishing speed of railroad travel had both pitfalls and potential. On the morning of November 8, 1833, the steamboat magnate Cornelius Vanderbilt and former president John Quincy Adams boarded the Camden and Amboy Railroad on a route that linked New York and Philadelphia. The railroad was one of the nation's first. A technology pioneered in the English mining industry during the 18th century, railroads were just starting to be used for freight and passenger transport in the U.S. Vanderbilt and 23 other passengers careened across the landscape at the fantastic speed of 25 miles per hour when the train's axle broke and its passengers went slid down an embankment. Two died, and almost all were terribly injured. It was "the most dreadful catastrophe that ever my eyes beheld" wrote Adams. "Men, women, and a child, scattered along the road, bleeding, mangled, groaning, writhing in torture and dying, was a trial of feeling to which I had never before been called." Vanderbilt who suffered from a broken leg, broken ribs, and a punctured lung swore he would never ride the rails again. Yet, he could not resist investing in and shaping the nation's next great, rapid transportation technology and went on to establish an empire of railroads in the Northeast, centered around his Grand Central Depot on 42nd Street in New York City.⁴⁹

48. Vanderbilt and other observers recognized the train's possibilities for liberating human travelers from the constraints of nature. Trains did not have to follow water routes. They could run year-round. And, most of all, they were much faster. No longer was speed constrained by how fast humans and animals could convert food into energy. Stoked with wood and later coal, steam engines made

⁴⁸ MOHL and BILES, THE MAKING OF URBAN AMERICA, *supra*, at 11.

⁴⁹ MICHAEL HILTZIK, IRON EMPIRES: ROBBER BARONS, RAILROADS, AND THE MAKING OF MODERN AMERICA 4-5 (2020).

travel speeds much greater and more consistent.⁵⁰ A trip on a mule-drawn Erie Canal boat from Albany to Buffalo took up to four days, for instance. By the mid-19th century, trains covered the same route in under five hours.⁵¹

- 49. Through the 19th century, railroad operators collaborated with Wall Street investors, states, and the federal government to construct a massive network of passenger and freight railroads. State governments often wanted railroads but were leery of incurring the enormous costs of building them, especially after canal costs had destroyed so many state budgets. They addressed this problem through chartered railroad corporations. A charter often granted special privileges, like rights of way, in exchange for construction funded by private investors. Railroads raised money from investors by selling subscriptions and/or by issuing stocks and bonds to Wall Street investors.⁵²
- 50. The nation's massive railroad network had a distinctive geography connected to the political economy of each region. In 1860, cotton from the south accounted for over half of the exports of the United States. The crop flowed from plantations along turnpikes, rivers, and the 9,800 miles of track built before the Civil War. The North had 20,800 miles of track, including Vanderbilt's Erie Railroad system, which stitched together the seaport cities with the agricultural processing centers and manufacturing hubs of the Great Lakes, stretching west to Chicago. ⁵³ By 1860, Chicago was the western railroad hub of the United States. Most of the nation's western roads extended from the city into the agricultural hinterland of the Mississippi and Missouri River valleys. Northwest of the city, the Chicago and Northwestern Railroad spread over a vast expanse of territory in

⁵³ HILTZIK, IRON EMPIRES, *supra*, at 13.

⁵⁰ CRONON, NATURE'S METROPOLIS, *supra*, at 80; MELOSI, COPING WITH ABUNDANCE, *supra*, at 20-22.

⁵¹ HILTZIK, IRON EMPIRES, *supra*, at 10. 52 CRONON, NATURE'S METROPOLIS, *supra*, at 67; HERBERT HOVENKAMP, ENTERPRISE AND AMERICAN LAW, 1836-1937 (1991); RICHARD WHITE, RAILROADED: THE TRANSCONTINENTALS AND THE MAKING OF MODERN AMERICA (2011).

Illinois and Wisconsin. The Chicago and Rock Island ran due west to the Mississippi River and, after becoming the first to bridge the river in 1856, extended into Iowa. The Chicago, Burlington, and Quincy; the Chicago and Alton; and the Illinois Central extended southwest and due south from the city to points along the Mississippi River. All of these railroads, in turn, brought wheat, corn, cattle, and hogs to Chicago for processing and transshipment to eastern markets. ⁵⁴

- War era led to a revolution in travel times. In 1830, when road and canal travel predominated, it took a traveler from New York City one day to reach Albany and Philadelphia; 2 days to reach Baltimore and Boston, 6 days to reach Charleston, 1 week to reach Cleveland, and 2 weeks to reach Chicago. By 1857, that same traveler could go from New York City to Boston, Albany, Philadelphia, Baltimore, Pittsburgh, and Cleveland in one day. It took three days to reach Chicago, Charleston or Saint Louis. The trans-Mississippi West, though, was harder to reach from the East Coast until the late 19th century. 55
- 52. While most railroads were designed for intercity travel, a few railroad companies established commuter services in and around the nation's largest cities. In 1837, the New York and Harlem Railroad—which Cornelius Vanderbilt later took over—began steam railroad service from lower Manhattan to 125th Street. By the 1840s, it extended that line into Westchester County, spurring suburban development. The Long Island Railroad and the Flushing Railroad soon enabled Manhattanites to commute to the east. In New Jersey, meantime, the route from Newark to Jersey City became one of the busiest in the world. By 1859, residents of metro Philadelphia could take one of more than 40 trains making commuter stops in the northwest suburb of Germantown, PA, and the Chicago suburb of Evanston was growing quickly because of service provided by the Chicago and Milwaukee

⁵⁴ CRONON, NATURE'S METROPOLIS, *supra*, at 68.

⁵⁵ *Ibid.* at 77.

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Railroad. No city has a greater proportion of railroad commuters than Boston, where, from the 1830s, passengers could ride the train to Brookline. Within a decade, there was service to Lowell, Lynn, and Somerville, Medford, and Woburn, among other towns. These steam railroads were supported by well-to-do commuters who paid annual rates that wage-workers could not afford. Boston to Lynn in the early 1840s cost \$62 per year, for example, and the New York to Bronxville annual fee in 1853 was \$45. One effect of these services was to fuel a suburban real estate boom. In 1855, an English observer in New York remarked that suburbs were "springing up like mushrooms on spots which five years ago were part of the dense and tangled forest...."

Just as the expansion of railroads facilitated the settlement of the suburbs, it spurred movement to the trans-Mississippi West. Between 1865 and 1895, the federal government subsidized the construction of transcontinental railroads that stretched to western lands without populations capable of sustaining business—at least at the start of construction. The subsidies came in the form of millions of acres of land grants and the federal government guaranteed the credit of major railroads. In 1862, Congress passed the Pacific Railway Act authorizing the construction of a transcontinental railroad. In 1869, the Central Pacific and the Union Pacific linked their tracks at Promontory Point, UT. By 1900, there were four additional transcontinental railroads. The penetration of railroads into the far West increased travel speeds and safety, and it made possible the shipment of timber and minerals from the West to the east. It also opened up western settlement. The comparison to the Oregon Trial is illustrative. Between 1840 and 1860, up to 400,000 people made the 2,000-mile trip from Independence Missouri to destinations in northern California, the Willamette Valley in Oregon, and the Puget Sound region in wagons that covered between 10 and 20 miles per day. 57 That

⁵⁶ Baxter quoted in JACKSON, CRABGRASS FRONTIER, *supra*, at 35-37.

⁵⁷ William L. Lang, Oregon Trail in OREGON ENCYCLOPEDIA (Ulrich Hardt, Jeff LaLande &Linda Tamura eds., 2008), https://www.oregonencyclopedia.org/articles/oregon trail/.

dangerous, costly journey took up to six months. In 1870, by contrast, a passenger could travel by rail from New York to San Francisco in just 7 days for \$65 on a bench in third class, \$110 for second class accommodations, and \$136 for a spot on a first-class Pullman sleeping car. ⁵⁸

- 54. The railroad was not only quicker, though. It thoroughly transformed the travel experience by shielding people from harsh aspects of nature. People who traveled on foot, hoof, boat, and wagon constantly worried about dwindling daylight, ice in lakes and rivers, or a coming storm. The railroad changed nature from a force to be reckoned with to a scene to behold. "When one boarded a train," notes environmental historian William Cronon, "one entered a world separated from the outside by its own peculiar environment and sense of time. Train passengers...became spectators who could enjoy watching the world go by instead of working their way across it on foot or horseback." While they watched the world go by, train passengers even enjoyed a number of amenities. First-class travelers at the end of the 19th century could expect access to good food, a library, and a barber shop, and, they could spend the journey rubbing elbows with the nation's business and social elite. 60
- 55. The advent of railroad travel radically altered the size and shape of cities in indirect and direct ways. Indirectly, the railroad transformed the way that industries were organized across space and led to growing demand for laborers in cities. The Chicago Union Stockyards offers a case in point. Before the stockyards opened, animal slaughter was a local affair. From the opening of the stockyards in 1865 on, it became a continental project. The Chicago stockyards included a massive collection of holding pens, abutting railroad tracks, and a number of huge

⁵⁸ The Gilder Lehrman Institute of American History, Transcontinental Railroad Fact Sheet at GILDER LEHRMAN.ORG (2014),

https://www.gilderlehrman.org/sites/default/files/inline-pdfs/Transcontinental%20Railroad%20Fact%20Sheet.pdf.

⁵⁹ CRONON, NATURE'S METROPOLIS, *supra*, at 78.

⁶⁰ DAVID C. NICE, AMTRAK: THE HISTORY AND POLITICS OF A NATIONAL RAILROAD 1 (1998).

slaughterhouses. Texas longhorns herded up the Chisholm Trail by cowboys were loaded onto train cars in Abilene, KS, and shipped to Chicago, where immigrant workers dissected thousands of animals each day on a disassembly line (Henry Ford's inspiration for his Model T assembly line) in one of the city's great meat packing houses. ⁶¹ Workers then loaded the cuts of meat onto railroad cars for shipment to consumers in every city with a railroad link to Chicago. Thus, the railroads allowed for meat production—and production of many other goods—to be concentrated in a single city. In effect, manufacturers harnessed economies of scale to create products like meat with greater speed and at lower cost than ever before.

56. These new models of production required a massive pool of urban laborers. Industrial cities were enormous compared to the commercial metropolises of the early part of the 19th century. New York grew from 813,000 in 1860 to more than five million by 1920, and Chicago increased from 100,000 to nearly three million in the same period. Explosive urban growth also happened in smaller places like the port city of Duluth, MN, which grew tenfold in the 1880s from 3,300 to more than 33,000, and the steel-producing town of Birmingham, AL, which rose from 3,000 to more than 26,000. Commentators remarked on the migration of people from rural areas in the U.S. and Europe to cities. "We cannot all live in cities," said newspaperman Horace Greeley in 1867, "yet nearly all seem determined to do so." 62

B. <u>City Streets and Omnibuses</u>

57. In addition to facilitating processes of production that required large, urban labor forces, trains made it possible—and necessary—for people to construct cities across greater geographic expanses. Whereas pre-industrial cities had long been marked by the blending of workspace and homes, industrial production demanded differentiation of sites of residential life and production. The masses of

⁶¹ HENRY FORD, MY LIFE AND WORK 81 (1922).

⁶² MOHL AND BILES, THE MAKING OF URBAN AMERICA, *supra*, at 83-84.

urban workers had to commute from across the city to their jobs, and the railroad made that possible. The streets of industrial cities were cluttered with people using older modes of travel—wagons, horseback, and walking—as well as those were using new technologies like the railroad, cable car, and electric trolley.

- 58. The streets of 19th-century American cities were rough and often unevenly built. Before the 1880s, many city governments often built streets and sidewalks using a method of "special assessment," or a tax on the people and businesses whose property abutted the improvements. The method was essentially the local solution to the national internal improvements dilemma where people did not want to be taxed for infrastructure that would be used by people in other places. ⁶³ Streets consisted of different forms, including wooden planking, dirt, crushed rocks, cobble stones, limestone, and wood block surfaces called "Nicholson paving." In addition to the roadway and sidewalks themselves, city streets were increasingly cluttered with new types of infrastructure, including gas lines, electric wires, and telegraph and telephone poles. ⁶⁴
- 59. City Councils heavily regulated the use of city streets. There were long-standing, pre-industrial traditions of local regulation of health, safety, and public morals that affected how people used the streets. One of Chicago's first municipal laws, in 1837, reflected this tradition of protecting what legal scholar William Novak calls "the people's welfare." It read: "No dung, dead animal or putrid meats and fish or decayed vegetables [were] to be deposited in any city street, avenue, lane or public square." The law was meant to curb pollution, but the city also took steps to facilitate travel by conscripting able bodied men into street

⁶³ ROBIN EINHORN, PROPERTY RULES: POLITICAL ECONOMY IN CHICAGO, 1833-1872 (1991).

⁶⁴ PÈRRY R. DUIS, CHALLENGING CHICAGO: COPING WITH EVERYDAY LIFE, 1837-1920 7-8 (1998). On urban gas and electrical and telephone infrastructure see, MARK H. ROSE, CITIES OF HEAT AND LIGHT: DOMESTICATING GAS AND ELECTRICITY IN URBAN AMERICA (19950; HAROLD L. PLATT, ELECTRIC CITY: ENERGY AND THE GROWTH OF THE CHICAGO AREA, 1880-1930 (1991); and RICHARD R. JOHN, NETWORK NATION: INVENTING AMERICAN TELECOMMUNICATIONS (2015).

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repair, and, as the city grew bigger, enacting speed limits on horses and wagons, and imposing new traffic rules to smooth passage through intersections and over bridges. City lawmakers' regulation of the streets in Chicago and elsewhere was not novel, but the growth of cities and the advent of new transportation technologies made the question more pressing. As historian Perry Duis put it, "the use of new technologies to get more quickly from one place to another tended to force citizens to rethink how they used the roadways." 65

60. City streets were reshaped by new commuting technologies. Well-todo people had long hired horse-drawn stagecoaches for long-distance trips and cabs, called "taxis" or "hackneys," to take them between cities or just across town. In 1826, an innovation developed in Nantes, France called the omnibus helped make such travel more accessible by creating an economy of scale. The omnibus was a large, horse-drawn car that anyone could board for a fare, usually about 10 cents. It carried about 12 passengers who sat on wooden seats as it bumped along the streets. In the United States, city governments issued franchises to operate coaches along a specific street. New York City's first omnibus appeared on Broadway in 1828, and by 1833 it counted 80 lines, 255 by 1846, and 683 by 1853. There were about 20 firms operating New York's omnibuses, and passengers on the busiest streets had to wait just two minutes on average to catch a coach. While New York led the United States in omnibuses, they spread to many other cities. By of the 1840s, omnibuses were running in Boston, Baltimore, and Philadelphia, for example. The omnibus, though, was plagued by crowding, and it offered an uncomfortable and slow ride at about 5 miles per hour. Given these drawbacks, it was supplanted by more energy-efficient alternatives. ⁶⁶

⁶⁵ DUIS, CHALLENGING CHICAGO, *supra*, at 4-5, 11; WILLIAM NOVAK, THE PEOPLE'S WELFARE: LAW AND REGULATION IN NINETEENTH-CENTURY AMERICA 3-6 (1996)

⁶⁶ JACKSON, CRABGRASS FRONTIER, *supra*, at 33-34 (1985); BRIAN J. CUDAHY, CASH, TOKENS, AND TRANSFERS: A HISTORY OF URBAN MASS TRANSIT IN NORTH AMERICA 9-10 (1990).

C. Horse Cars, Cable Cars, and Streetcars

61. Transit companies soon replaced omnibuses with "horsecars." Starting in the 1830s and 1840s, many U.S. cities authorized private companies to run horse-drawn cars on rails through the streets, a far smoother and a more efficient use of horse power. One horse could pull a 30-to-40 passenger vehicle at speeds of 6 to 8 miles per hour. Consequently, the cars could hold more people, and transit companies dropped the fares from 12 cents on the omnibus to about 10 cents a ride. By the middle of the 1850s, horsecars were replacing omnibuses in the major thoroughfares of New York, Brooklyn, Boston, Philadelphia, Baltimore, Chicago, Pittsburgh, Cincinnati, and New Orleans. Many other cities added service in subsequent decades. At its peak in the 1880s, the horsecar industry consisted of 415 firms, 30,000 workers, 18,000 cars, 3,000 miles of track, and 1.2 billion annual riders. 8

62. The growth of industrial cities and the advent of railroads resulted in more, not less reliance on horse power. Omnibus and horsecar companies had to maintain huge stables of horses and set up places to switch out their teams along the routes. There were, meantime, many horses engaged in pulling various private and commercial wagons. Private carriages came in many shapes and sizes, and there were taxis for hire in the form of "hansoms" and "herdics." Teamsters hauled freight, often to and from railroad depots, and many other businesses employed specially-adapted horse-drawn wagons. The "baker's wagon," for instance, had double paned glass to keep the goods warm and "ice wagons" were equipped with insulated compartments. Police wagons had fast horses, warning bells, and irons to detail prisoners. ⁶⁹ Wagons and horses were omnipresent in cities until after the 1920s. At the start of the 20th century, for example, the City of Saint Louis had a

⁶⁷ JACKSON, CRABGRASS FRONTIER, *supra*, at 39.

⁶⁸ CUDAHY, CASH, TOKENS, AND TRANSFERS, supra, at 12-13.

⁶⁹ DUIS, CHALLENGING CHICAGO, supra, at 27 (1998).

human population of over half a million, between 15,000 and 20,000 wagons, and about 30,000 horses.⁷⁰

- 63. The drawbacks of horse power were significant, however, and urban transit companies replaced the horse-drawn omnibuses as new technologies emerged. It was expensive to maintain stables, feed horses, and replace old stock. Some drivers and teamsters abused animals, moreover, which sparked anti-cruelty campaigns, which resulted in some animal protection laws. Horses wrought havoc on the urban environment by filling the streets with poop that turned to dust in dry weather and to mud in the rain. Horses also got sick sometimes. During the "Great Epizootic of 1872," so many North American horses succumbed to an equine flu that it shut down omnibus and horsecar lines, halted the U.S. mail and military operations against western Indians, and made it impossible to unload freight from ships and trains.⁷¹
- 64. One of the first technologies to help break city dwellers' dependence on horse power was the cable car. San Francisco's Andrew Hallidie opened the first line on Clay Street as a response to another limitation of horse-drawn vehicles: Horses could not get good footing on the steep, hilly streets. The cable car, driven by a "steel rope" or cable embedded in the street, moved along at a steady speed, using a system of pulleys powered by steam engines. The operator controlled movement with two levers, one used to "grip" the rope or let it go, and another to apply breaks to the wheels. Starting in 1882, Chicago transit companies built the biggest cable car system in the U.S. at the great cost of \$100,000 per track mile. At their peak in 1890, cable cars were running in 23 cities on 300 miles of track and carrying 373 million passengers per year.⁷²

⁷⁰ CLAY MCSHANE, DOWN THE ASPHALT PATH: THE AUTOMOBILE AND THE AMERICAN CITY 191 (1994).

⁷¹ CLAY MCSHANE AND JOEL TARR, THE HORSE IN THE CITY: LIVING MACHINES IN THE NINETEENTH CENTURY (2011).

⁷² JACKSON, CRABGRASS FRONTIER, *supra*, at 104; CUDAHY, CASH, TOKENS, AND TRANSFERS, *supra*, at 27-33.

- 65. The cable car persists as a mode of transportation technology to this day, but its heyday in the United States lasted only between the 1880s and the 1910s. By 1913, only 20 miles of track were still in use. 73 Their shortcomings were many. The system was centralized, so when a cable broke the entire line ground to a halt. The weight of rush hour traffic could strain the cables, and snow and ice made them hard for the cars to grip in wintery conditions. Another flaw: cable cars could only travel at a uniform speed. 74
- developed in the 1880s by several inventors. Also called a trolley, electric streetcars soon became the dominant form of urban public transportation. They were powered by electricity coursing through wires elevated above the route, often the old horsecar lines. Streetcars could carry more weight and the cars coupled together to accommodate more passengers. They also traveled much faster than previous forms of transport available to the public. Consequently, they killed more pedestrians than wagons, horsecars, and omnibuses. That fact, along with fear of the wires falling down and electrocuting people, gave some citizens and lawmakers pause about adopting streetcars in congested spaces. Ultimately, however, the practicality of the streetcar won out, and many cities across the United States began replacing their remaining horse-drawn and cable car systems with streetcars starting in the 1890s. By 1912, there were more than 70,000 streetcars shuttling passengers across 370 U.S. cities.⁷⁵
- 67. The introduction of intracity railroads transformed social class relations and the geographic scope of 19th-century cities. One effect was the proliferation of "streetcar" or "railroad" suburbs. Instead of living in the dense, class-mixed city, wealthier people could self-segregate by moving further away

 $^{^{73}}$ ROBERT C. POST, URBAN MASS TRANSIT: THE LIFE STORY OF A TECHNOLOGY 31 (2010).

⁷⁴ JACKSON, CRABGRASS FRONTIER, *supra*, at 105.

⁷⁵ POST, URBAN MASS TRANSIT, supra, at 31.

from central business districts and commuting to the city. To be sure, this phenomenon was not exclusive to rail travel. In the 1830s, ferry lines were regularly shuttling residents of Brooklyn and Queens (not part of New York City at the time) into Manhattan for work. The railroad, though, freed commuters from waterways and led to a vast expansion of the geographic scope of metro regions. In 1852, Alexander Jackson Davis, for instance, designed Llewellyn Park in New Jersey, and the suburbs of Villanova, and Bryn Mawr cropped up along the Main Line—extending from Philadelphia. In 1869, Frederick Law Olmsted designed Riverside outside of Chicago. These suburbs—and many others—enabled many people of means to escape the pollution, congestion, and crime concentrated in cities and occupy a new, middle landscape where they had connection to lawns, nature and domestic tranquility. ⁷⁶

D. <u>Elevated "El" Trains and Subways</u>

68. Through the late 19th and early 20th centuries, four U.S. metropolitan areas developed electric railway systems designed to handle a heavy volume of local traffic: New York City (1904), Chicago (1892), Boston (1894), and Philadelphia (1907). These "heavy rail" systems comprise street grade railways, subterranean (subway) lines, and "El" or elevated lines, but the terms "subway" and "El" have become a shorthand for these systems. Unlike the earlier transit systems described above, which were generally built and operated by private persons or entities, these new El and subway systems were built and operated by a combination of private and public institutions as a means to facilitate commuting through crowded urban landscapes. These four systems therefore eventually became the first true public transportation systems in the history of the United States.

⁷⁶ JACKSON, CRABGRASS FRONTIER, *supra*, at 73-86.

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PART TWO: HISTORICAL RESTRICTIONS ON THE CONCEALED CARRYING OF FIREARMS ON TRANSIT SYSTEMS

- 69. While there is an extensive historical literature on the evolution of transportation in the United States, there has been little written about the question of taking firearms on various forms of transit. To better understand the practices surrounding carrying or not carrying firearms on transportation, I consulted more than seventy railroad company rule books and timetables. Starting in the middle of the 19th century, railroad companies created extensive rule books for personnel and sometimes passengers. They also published timetables for passengers. Railroad rule books detailed various operating procedures ranging from track signaling practices to the decorum of employees. Timetables, meanwhile, included train schedules as well as—sometimes—references to railroad procedures. Not all of these rule books and timetables survive, but many digital as well as brick and mortar archives contain some historic railroad rule books and timetables. Moreover, given the difficulty of locating historic railroad rule books and the time constraints of this case, I was not able to perform an exhaustive search and analysis of all historic railroad rule books that are still in existence today. However, from the documents that I was able to consult, I am able to make the following observations.
- 70. First, many rule books and timetables do not mention firearms at all. I examined approximately seventy documents, in both online and brick and mortar archives, dating from the middle of the 19th century to the late 20th century, and I found mentions of firearms in approximately fifteen percent of those books. One possible explanation for this is that municipal and state laws, not railroad policies, dealt with the question of concealed carry.
- 71. Second, some railroads made references to the practice of transporting guns as luggage stowed on baggage cars, and they noted proper safety procedures for transporting guns. There were no instances in which I saw reference to passengers or employees—other than railroad police—being allowed to take loaded

weapons on train cars. The 1880 timetable for the Union Pacific Railroad, for example, stated that "Dogs and Guns will be transported in baggage car, by special arrangement of owner with train baggageman, the rate charged on the former never to exceed one-half cent per mile, for distances over 50 miles, and on the latter, 25 cents for each passenger division." Similarly, in its 1894 rule book, the Chicago, Milwaukee & Saint Paul Railway Company stipulated that "Dogs and guns of passengers will be carried in baggage cars free of charge, provided the total weight of the baggage, including dogs and guns, does not exceed 150 pounds for each passenger." The Burlington and Missouri Railroad's 1894 timetable noted that "Invalid and Steamer Chairs, Saddles and Guns belonging to passengers on the train, will be carried at OWNER'S RISK in baggage car free of charge when there is room to do so without interfering with regular business."

72. Several railroads rule books—including those of the Illinois Central (1897), Southern Pacific (1908), and the Michigan Central (1923)—made references to the fact that baggage handling employees were expected to use the abbreviation "G. C." for a gun case, indicating that passengers commonly put firearms in cases and checked them in the baggage car.⁸⁰

⁷⁷ UNION CENTRAL PACIFIC RAIL ROAD LINE, "The Great American Over-Land Route," (1880), https://unionpacific.canto.com/s/HIJI7?viewIndex=2.

"General Rules and Regulations for Handling Freight and Passenger Traffic," 190 (1923), https://babel.hathitrust.org/cgi/pt?id=mdp.39015071563640&view=1up&seq=1&q1=gun.

^{7\hat{8}} CHICAGO, MILWAUKEE & SAINT PAUL RAILWAY COMPANY, "Rules and Instructions," 52 (1894), https://books.google.com/books?id=xov3sYzwJvUC&newbks=0&printsec=frontcover&pg=PP7

[&]amp;dq=Chicago,+Milwaukee+%26+Saint+Paul+Railway+Company,+%E2%80%9CRules+and+In structions,%E2%80%9D+July+1,+1894&hl=en#v=onepage&q=Chicago%2C%20Milwaukee%20%26%20Saint%20Paul%20Railway%20Company%2C%20%E2%80%9CRules%20and%20Inst ructions%2C%E2%80%9D%20July%201%2C%201894&f=false.

⁷⁹ BURLINGTON AND MISSOURI RIVER RAILROAD, "Local Time Tables," 31 (1894), https://wx4.org/to/foam/maps/2Wx4/003/1894-06-01Burlington%26MissouriRiver LocalPTT.pdf.

⁸⁰ ILLINOIS CENTRAL RAILROAD COMPANY, "General Instructions," 153 (1897); SOUTHERN PACIFIC COMPANY, "Instructions to Station Baggageman and Train Baggagemen," 59 (1908), https://wx4.org/to/foam/maps/1rule/books/SP/1908-12-01SP INSTRUCTIONS TO BAGGAGEMEN.pdf; MICHIGAN CENTRAL RAILROAD,

- 73. Third, some railroads imposed explicit restrictions on employees and/or passengers carrying loaded and/or uncased weapons. The Central Pacific Railroad, for instance, made several mentions of its firearm policies in its 1883 baggage policy book. Those rules were:
 - a. "Prohibited articles—Guns, umbrellas, walking sticks, baby-wagons, saddles, jewelry-boxes, lunch-baskets, and parrots are not baggage, and must not, under any circumstances, be checked."
 - b. "Guns, in cases and not loaded, and canary birds, in cages, not exceeding one cage to each passenger, may be carried in day or sleeping cars without charge."
 - c. "In all other cases, guns and saddles must be put in the care of the T. B. M., who is allowed to collect, for carrying each one any distance on his route, twenty-five cents each." (T. B. M. refers to "Train Baggageman," according to abbreviations on p. 2).
 - d. "The fees for carrying dogs, monkeys, parrots, guns, baby-wagons, and saddles are for the personal compensation of the T. B. M. for the extra work and responsibility they cause him."81
- 74. The Union Pacific's 1887 timetable noted that firearms may be carried on passenger cars only if in cases and that uncased guns must be carried in the baggage car. It read: "Guns in cases may be carried by passengers in coaches without charge, or they will be checked free by baggage agents as part of the usual baggage allowance. Guns uncased will be carried in baggage car only." The Chicago Burlington and Quincy noted in 1903 that "Guns in cases may be checked as baggage" but it prohibited assembled, loaded weapons from being taken in

⁸¹ CENTRAL PACIFIC RAILROAD AND LEASED LINES, "Rules for the Government of the Baggage Department," 7, 17-18 (1883), https://californiarevealed.org/do/81e21b0d-dc24-4280-b87d-180adc5352fc.

⁸² UNION PACIFIC ROUTE, "The Shortest, Quickest, Safest and the Favorite Transcontinental Line," (1887), https://unionpacific.canto.com/s/HIJI7?viewIndex=2.

- 75. The Northern Pacific Railroad likewise prohibited carrying uncased guns in railroad cars. Its 1909 timetable stated: "Guns in cases and unloaded may be checked as baggage. When put together ready for use they must not be carried in passenger cars but will be cared for in baggage car free of charge at owner's risk."⁸⁴
- 76. In addition to these prohibitions on the carrying of uncased or loaded guns in passenger cars, a number of other railroads established policies against carrying guns for employees and/or passengers. For example, in 1922, the Dallas Railway Company "prohibited...carrying concealed weapons while on duty or about the company's property."⁸⁵ And, in 1943, Santa Fe Railroad stipulated that "Passengers, except military or peace officers in performance of their duties, are not permitted to take guns into passenger cars unless they are disconnected." ⁸⁶
- 77. The historical evidence I have consulted indicates that railroad companies sometimes included discussions of safe transport of guns—usually checked in a case—and sometimes specified that passengers and/or employees not carry concealed and/or uncased weapons on train cars.
- 78. In light of the fact that many railroad rule books and timetables did not make any comment on the matter of guns on trains, it is also necessary to consider state and municipal laws that would have applied to travelers to understand the rules about carrying guns on mass transit. There was no "public transit" in 19th century America, but there were laws that would have applied to

https://wx4.org/to/foam/maps/2Wx4/006/1903-09-06CB%26Q_systemPTT.pdf.

86 SANTA FE RAILROAD, "Instructions for Trainmen," 7 (1943), https://sfrhms.org/wp-content/uploads/2019/08/Circ-33-S InstPassTransport.pdf.

⁸³ BURLINGTON ROUTES, "Time Tables," 7 (1903),

⁸⁴ NORTHERN PACIFIC YELLOWSTONE PARK LINE, "Timetables" 62 (1909), https://wx4.org/to/foam/maps/2Wx4/004-/1909-07-03NP systemPTT.pdf.

⁸⁵ DALLAS RAILWAY COMPANY, "Rules and Regulations for the Government of Employees," 10 (1922), https://wx4.org/to/foam/maps/2-seabass/001/1922-10-15DallasRy_rules-seabass.pdf.

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riders—as well as everyone else—in cities with significant transportation in rastructure. Chicago, for instance, was the fifth largest U.S. city in 1870, and it was a national leader in the development of intracity and intercity transportation systems. In August of 1871, the Chicago Common Council passed a law prohibiting concealed carry of deadly weapons, including firearms. Section 1 read: "That all persons within the limits of the city of Chicago are hereby prohibited from carrying or wearing under their clothes, or concealed about their persons, any pistols, or Colt, or slungshot, or cross knuckles, or knuckles of lead, brass or other metal, or bowie knife, or dirk-knife, or dirk, or dagger or any other dangerous or deadly weapon." 87

79. The law is instructive in four key respects. First, it is important to note that many of the municipal restrictions against the carrying of firearms that date to the nineteenth century are hard to find. They are on paper documents and not necessarily available in digital databases. Second, the language used in the Chicago law mirrors that used in laws enacted in other states and cities⁸⁸, suggesting these prohibitions were common. Third, the concealed carry prohibition would have applied to passengers riding an omnibus or streetcar across town. Fourth, police records from the 1870s show that Chicago police did arrest people for violation of the concealed carry law. We know therefore that it was enforced. According to annual reports of the Chicago Police Department, the number of arrests for violation of the city's concealed carry law was: 153 in 1875, 184 in 1876, 336 in 1877, 309 in 1878, and 328 in 1879. All of these facts indicate there are compelling reasons to find that there was a past practice of prohibiting the concealed carry of weapons in urban spaces—inclusive of, but not limited to, transportation infrastructure.

See, generally, Defendants' compendium of historical analogues filed concurrently herewith.

⁸⁷ CHICAGO CITY COUNCIL, *PROCEEDINGS OF THE COMMON COUNCIL* 271 (1871) (Exhibit 2).

SUMMARY OF OPINIONS

- 80. The first public transit systems as we understand them today emerged in the United States during the first half of the 20th century. Prior to that time, transportation services were provided exclusively by private entities that usually received a charter or license to operate from a state or local government. Starting in the early twentieth century, public outcry over poor service and mounting financial pressures on transit companies forced a change. Several big cities replaced their private transportation companies with publicly-run systems. Those cities included San Francisco (1909), New York (1940), and Chicago (1947), with many more following in the middle of the twentieth century. Thus, public transit systems, as we know them today, date to the most recent chapter of American transportation history.
- 81. The Preindustrial Era of United States transportation history spans the period from the 1600s to 1800. During that time, travel was powered by wind, foot, and/or hoof. The population was largely centered on the eastern seaboard where cities like Philadelphia, New York, and Boston served as import/export hubs for agricultural commodities and European manufactures. The seas and rivers were the most efficient pathways. Manmade infrastructure was limited to a fragmented network of rough roads constructed, in various turns, by individuals, corporations, and local governments. Travelers walked, rode horses, or less commonly, took their own wagons. A traveler with the means to do so could, alternatively, pay a privately-owned stagecoach, ship, or ferry boat line to take them to their destination. Travel was uncomfortable, time consuming, and costly.
- 82. The Canal and Early Steamboat Era began in 1800 and lasted until the 1830s. State-financed canal projects like the Erie Canal helped open the North American interior for settlement and trade, leading to the expansion of domestic markets. At the same time, a remarkable new technology—the steamboat—helped free people from the constraints of wind and human-and-animal-supplied energy.

Steamboat travel made it possible to move people and freight over inland waters with relative ease, speed, and regularity. Steamboat travel spurred the growth of river cities like New Orleans, St. Louis, and Cincinnati, and, for the first time, permitted the well-to-do to make routine ferry trips from suburban settlements like Brooklyn and towns in northern New Jersey to commercial centers like New York City.

- 83. The Industrial Railroad City Era began in the 1840s and lasted until the 1920s. The railroad freed travelers from the limits of wind, human, and animal power as well as from having to follow watercourses. It became possible to go anywhere track could be laid, and the steam engine—fueled by wood and coal—propelled people and goods at shocking speeds. The railroad fostered a new economic geography where people and goods were routinely shipped across the continent to big cities like Chicago, Cleveland, and New York where masses of urban laborers formed them into products for a national consumer market. At the same time, the railroad also drove the physical expansion of American cities, as privately-owned commuter rail systems whisked people back and forth from factories, commercial centers, and increasingly far-flung residential districts.
- transformed by powerful forces between the first period of English colonization in the 1600s and the 2020s. Those transformative, historical forces include: new energy and transportation technologies, massive corporations, and the policies of state, local, and federal officials. To analogize between these distinctive periods in U.S. transportation history—especially between contemporary public transportation systems and the private turnpikes, ships, ferries, and stagecoaches of the preindustrial era—would be to ignore the transformative power of these historical forces and deny the economic dynamism of the United States. Thus, it is improper and unhelpful to analogize the turnpikes, stage coaches, streets, roads, wagons, ferries, and shops of early America to the transit systems of today.

While there was no public transportation before the first half of the 85. 20th century, some of the available historical records from private railroad companies and city governments demonstrate that there were prohibitions against carrying concealed weapons on trains and other forms of transit common in urban America. It is possible that additional examples of similar prohibitions exist, but identifying such examples would be a time-consuming process that is not possible within the limited time frame for this filing. I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct. Executed on October 30, 2023, at Chicago, Illinois. Joshua Salzmann

Exhibit 1

Joshua Salzmann, Ph.D.

Associate Professor • Department of History • Northeastern Illinois University 5500 N. Saint Louis Ave. • Chicago, IL 60625 773-442-5632 • J-Salzmann@neiu.edu

EDUCATION

| University of Illinois at Chicago | 2008 |
|--------------------------------------|------|
| Ph.D., United States History | |
| University of Illinois at Chicago | 2003 |
| M.A., United States History | |
| Evergreen State College, Olympia, WA | 2000 |
| R A Liberal Arts | |

ACADEMIC APPOINTMENTS

Associate Professor, Department of History, Northeastern Illinois University
Assistant Professor, Department of History, Northeastern Illinois University
Visiting Assistant Professor, Department of History, University of Illinois at Chicago
Lecturer, Department of History, University of Illinois at Chicago
2010-2012
2008-2009

PUBLICATIONS

Book

Liquid Capital: Making the Chicago Waterfront (Philadelphia: University of Pennsylvania Press, 2018).

Winner of 2018 "Superior Achievement Award," Illinois State Historical Society
Honorable Mention in 2019 Jon Gjerde Prize competition, Midwest History Association

Peer-Reviewed Articles and Book Chapters

"Blood on the Tracks: Accidental Death and the Built Environment," in *City of Lake and Prairie*: *Chicago's Environmental History*, eds. William C. Barnett, Kathleen A. Brosnan, and Ann Durkin Keating (University of Pittsburgh Press, 2020).

"Bionic Ballplayers: Risk, Profit, and the Body as Commodity, 1964-2007," (co-authored with Sarah Rose) *LABOR: Studies in the Working-Class History of the Americas* 11 (Spring 2014): 47-75.

Winner of 2016 biennial "Best Article Prize," Labor and Working Class History Association

"The Creative Destruction of the Chicago River Harbor: Spatial and Environmental Dimensions of Industrial Capitalism, 1881-1909," *Enterprise and Society: The International Journal of Business History* 13 (June 2012): 235-275.

"The Lakefront's Last Frontier: The Turnerian Mythology of Streeterville, 1886-1961," *The Journal of Illinois History* 9 (Fall 2006): 201-214.

Journalism

"How the Midwest will make America great. Again.," (co-authored with Theo Anderson) *Crain's Chicago Business*, December 11, 2018.

"How Chicago Transformed from a Midwest Outpost Town to a Towering City," *Smithsonian Magazine*, October 12, 2018.

"The Super Bowl's Violence is America's Violence," (co-authored with Theo Anderson) *In These Times*, January 30, 2015.

"Our Nation of Bionic Workers," (co-authored with Sarah Rose) *Chicago Tribune*, September 25, 2013, section 1, p. 23.

Book Reviews

Harold L. Platt, "Sinking Chicago: Climate Change and the Remaking of a Flood-Prone Environment," *American Historical Review* 124 (June, 2019): 1096-1097.

"Nature in the Urban Jungle: Leisure and Identity Formation in Chicago," a review of Colin Fisher, "Urban Green: Nature, Recreation, and the Working Class in Industrial Chicago," *Journal of the Gilded Age and Progressive Era* 15 (April 2016): 236-237.

Paul Ryscavage, "Norman B. Ream: Forgotten Master of Markets," *Journal of Illinois History* 17 (Spring 2014): 69-70.

Justin Kaplan, "When the Astors Owned New York: Blue Bloods and Grand Hotels in a Gilded Age," *Enterprise and Society: The International Journal of Business History* 8 (January 2007): 207-208.

Andrew Wender Cohen, "The Racketeer's Progress: Chicago and the Struggle for the Modern American Economy, 1900-1940," *Michigan Historical Review* 31 (Fall 2005): 159-161.

Encyclopedia Articles

"The Hepburn Act," in *The Oxford Encyclopedia of American Business, Labor, and Economic History*, ed. Melvyn Dubofsky (New York: Oxford University Press, 2013): 326-327.

"The Hepburn Act," in *The Oxford Encyclopedia of American Political and Legal History*, Vol. 1, eds. Donald T. Critchlow and Philip R. VanderMeer (New York: Oxford University Press, 2012): 438-439.

"Stephen Johnson Field," *Encyclopedia of United States Political History*, Vol. 4, ed. Robert Johnston (New York: CQ Press, 2010): 149-151.

"Melville Weston Fuller," *Encyclopedia of United States Political History*, Vol. 4, ed. Robert Johnston (New York: CQ Press, 2010): 151-154.

TEACHING

Undergraduate Courses

Crime and Violence in the U.S., American Environmental History, Urban Environmental History, The City in American History, Chicago History-First Year Experience, Business, Technology, and the State, Sport in American Culture, United States History from 1600 to 1877, United States History Since 1877, Historical Research and Writing Methods, Capstone Research Seminar, Arts and Urban Life

Graduate Courses

Readings in 20th Century U.S. History, Research Seminar in 20th Century U.S. History, Readings in 20th Century American Social History, Readings in American Cultural and Intellectual History

Thesis Direction

Rene Delgado, "Protecting the Body Politic: The Politics of Chicago's Department of Public Health," (M.A. History, Northeastern Illinois University, 2017).

Edward Byrd, "The Politics of the Policy Game: Race, Power, and Gambling in Chicago's Bronzeville, 1890-1952," (M.A. History, Northeastern Illinois University, 2014).

Molly Webber, "Menominee Indian Medical Self-Determination," (B.A. Honors Thesis, History, University of Illinois at Chicago, 2012).

FELLOWSHIPS

| Summer Research Stipend, National Endowment for the Humanities | 2020 |
|---|-----------|
| Summer Research Stipend, Northeastern Illinois University | 2020 |
| Faculty Excellence Award for Research, Northeastern Illinois University | 2019 |
| Summer Research Stipend, Northeastern Illinois University | 2016 |
| Newcomen Dissertation Colloquium Honorarium, Business History Conference | 2008 |
| Marion S. Miller Dissertation Fellowship, University of Illinois at Chicago | 2006-2007 |
| King V. Hostick Award, Illinois Historic Preservation Agency | 2006 |
| Marion S. Miller Dissertation Fellowship, University of Illinois at Chicago | 2005-2006 |
| History Doctoral Award, University of Illinois at Chicago | 2001-2005 |

GRANT WRITING & ADMINISTRATION

Co-author (with Dave Green) and Principal Investigator, "Unlocking Chicago's History: A Guide to Research in City Government Records," \$4,999, awarded to the Ronald Williams Library at Northeastern Illinois University by the Consortium of Academic and Research Libraries in Illinois, 2015-2017.

MEDIA APPEARANCES

Commentator on election buttons exhibit, "Chicago Tonight," WTTW Channel 11 Chicago, aired November 6, 2018

Commentator on early Chicago laws, "Curious City," WBEZ 91.5 Chicago, aired May 3, 2018

PRESENTATIONS

- "Teaching the History of Crime and Violence," (workshop) Professional Development Seminar for High School Teachers, Chicago, IL, February, 2020
- "Telling a Story with Historical Sources," (workshop) Chicago Metropolitan History Fair, Chicago, IL, January, 2020
- "The Creative Destruction of the Chicago River," (invited lecture) Chicago Maritime Museum, Chicago, IL, January 18, 2019
- "The Making of Liquid Capital," Phi Alpha Theda induction ceremony, Chicago, IL, April 2018
- "Analyzing Primary Sources," (workshop) Chicago Metropolitan History Fair, Chicago, IL, February 2018
- "Blood on the Tracks: Death and the Built Environment," (edited volume contributors' workshop) American Society for Environmental History Meeting, Chicago, IL, March 2017
- "The Commodification of Civic Beauty: Daniel Burnham and Chicago's Municipal (Navy) Pier," Conference on Illinois History, Springfield, IL, November 2015
- "Beauty Pays Better than any other Commodity:' Industry, Leisure, and Port Development in Daniel Burnham's Chicago," Social Science History Association Meeting, Chicago, IL, November 2013
- "Beauty Pays Better than any other Commodity:' Industry, Leisure, and Port Development in Daniel Burnham's Chicago," (invited lecture) American Public Works Association Congress, Chicago, IL, August 2013
- "Bionic Ballplayers: The Political Economy of Bodily Management in Major League Baseball, 1964-2007," (co-authored with Sarah Rose), Newberry Library Labor History Seminar, Chicago, IL, October 2011
- "Bionic Ballplayers: The Contractual Construction of Fitness in Major League Baseball, 1964-2005," (co-authored with Sarah Rose), Business History Conference, Saint Louis, MO, April 2011
- "Bigger, Stronger, Softer: The Contractual Construction of Fitness in Major League Baseball, 1964-2003," (co-authored with Sarah Rose), Labor and Working Class History Association Conference, Chicago, IL, May 2009
- "Bionic Ballplayers: Medicine and the Business of Baseball, 1964-2005," (co-authored with Sarah Rose), American Association for the History of Medicine Conference, Cleveland, OH, April 2009

"Justice Stephen Field's Instrumentalist Understanding of the Public Trust Doctrine," Policy History Conference, Saint Louis, MO, May 2008

"The Creative Destruction of the Chicago River Harbor, 1867-1925," Business History Conference, Cleveland, OH, June 2007

"The Geography of Jurisprudence: Public Lands for Private Profits, *Illinois Central v. Illinois* [1892]," Business History Conference, Toronto, ON, June 2006

"The Chicago Lakefront's Last Frontier: Streeterville, 1886-1921," Conference on Illinois History, Springfield, IL, October 2005

"The Tides of Liberalism: The 1889 Washington State Constitutional Convention's Tidelands Debate," Missouri Valley History Conference, Omaha, NE, March 2003

PROFESSIONAL SERVICE

| TOTAL SERVICES TO THE PROPERTY SERVICES OF MANAGEMENT OF SERVICES OF SERVICES | |
|---|--------------|
| Faculty Senator, Northeastern Illinois University | 2019-present |
| Steering Committee, Faculty Senate | 2020-present |
| Steering Committee, Chicago Gun Violence Research Collaborative | 2019-present |
| Chair, Assessment Committee, NEIU Department of History | 2017-present |
| Undergraduate Adviser, NEIU Department of History | 2016-present |
| Brommel Doctoral Scholarship Committee, NEIU | 2020 |
| Co-founder and Co-chair of History of Capitalism Seminar, Newberry Library | 2012-2018 |
| Chair, Fiscal Affairs Committee, NEIU Department of History | 2013-2017 |
| Scholarship Committee, NEIU Department of History | 2014-2017 |
| Faculty Hiring Committee, NEIU Department of History | 2018 |
| Local Arrangements Committee, American Society for Environmental History | 2016-2017 |
| College of Arts and Sciences Curriculum Committee, NEIU | 2016-2017 |
| Assessment Committee, NEIU Department of History | 2015-2017 |
| Fiscal Affairs Committee, NEIU Department of History | 2012-2013 |
| Judge, Chicago Metropolitan History Fair | 2006, 2011 |
| Referee, Urban Geography | 2008 |
| Coordinator, University of Illinois at Chicago History Dissertation Workshop | 2005-2006 |
| Local Arrangements Committee Staff, AHA Conference, Chicago, IL | 2003 |

Exhibit 2

Aug. 17,

271

11871.

Also,

Also,

The engrossed order authorizing the Comptroller to pay to L. H. Boldenweck the sum of two thousand eight hundred dollars on City Hall account.

Ald. McGrath moved that the order be passed.

The motion prevailed by the following vote:

Ayes—Knickerbocker, Dixon, Otis, Montgomery, Coey, McAvoy, Thompson, Whitaker, Daggy, Tracey, Schmitz, Hickey, W. S. Powell, Bailey, George Powell, Bateham, Walsh, Glade, Witteck, Sheil, Gill, McGrath, Buehler, Tyler, Schmidt, Schintz, Schaffner, McCaffrey, McCauley, Clarke, Devine, Busse, Mr. President—33.

Nose—None.

Nose—None.

The following is the order as passed:

Ordered That the City Comptroller be and is hereby authorized and instructed to pay to Louis H. Boldenweck the sum of two thousand and thirty-eight dollars and seventy-five cents (\$2,038.75), and charge the same to the City Hall account.

Also,

An engrossed ordinance concerning the carrying of con-cealed weapons and the confiscation of such weapons.

cealed weapons and the confiscation of such weapons. Ald. McAvoy moved the passage of the ordinance. The motion prevailed by the following vote: Ayes—Dixon, Otis, Coey, McAvoy, Whitaker, Daggy, Tracey, Schmitz, Hickey, W. S. Powell, Bailey, George Powell, Bateham, Walsh, Glade, Witbeck, Sheil, Gill, Buehler, Tyler, Schmidt, Schintz, Schaffner, McCaffrey, McCauley, Clarke, Devine, Busse, Mr. President—29.

Noes—Knickerbocker, Montgomery, Thompson, McGrath—4

Grath--4.

The following is the ordinance as passed:

AN ORDINANCE

Concerning the carrying of concealed weapons and the confiscation of such weapons.

Be it ordained by the Common Council of the City of Chicago:
SECTION 1. That all persons within the limits of the city of Chicago are hereby prohibited from carrying or wearing under their clothes, or concealed about their persons, any pistols, or Colt, or slung shot, or cross knuckles, or knuckles of lead, brass or other metal, or bowie-knife, or dirk-knife, or dirk, or dagger or any other dangerous or deadly weapon.

pistols, or Colt, or slung shot, or cross knuckles, or knuckles of lead, brass or other metal, or bowie-knife, or dirk-knife, or dirk, and agger or any other dangerous or deadly weapon.

SEC. 2. Any such weapon or weapons duly adjudged by any police magistrate, or justice of the peace of said city to have been worn or carried by any person in violation of section one of this ordinance, shall be forfeited or confiscated to the said city of Chicago.

SEC. 3. Any policeman of the city of Chicago may, within the limits of said city, without a warrant, arrest any person or persons whom such policeman may find in the act of carrying or wearing under their clothes, or concealed about their persons any pistol, or Colt, or slung-shot, or cross knuckles, or knuckles of lead, brass, or other metal, or bowie knife, or dirk-knife, or dirk-or dangerous or deadly weapon, and detain him, her or them in the City Jail or Armory unitl a summons or warrant can be procured on complaint made (under oath or affirmation) for the trial of such person or persons, and for the seizure and confiscation of such of the weapons above referred to as such person or persons may be found in the act of carrying or wearing under their clothes, or concealed about their persons.

SEC. 4. Upon complaint made under oath or affirmation to any magistrate or justice of the peace in said city, that any person has been guilty of violating any of the provisions of section one of this ordinance, a summons or warrant shall issue for the summoning or arrest of the offender or offenders—returnable forthwith; upon the return of such summons or warrant, such magistrate or justice of the peace shall order that the weapon or weapons, concerning the carrying or wearing of which such penalty shall have been incurred, shall be kept and detained until it shall be adjudged whether or not such weapon or weapons shall be confiscated to the city of Chicago.

SEC. 5. Upon any judgment having been rendered for a violation of any of the provisions of section one of this ordina

magistrate or justice of the peace acting as a police justice, or other officer authorized by law to receive such complaint shall render the cause on his docket as follows: The City of Chicago vs.—
(here describe the weapon or weapons by general description) and shall thereupon issue a writ which shall be in form, as nearly as may be, as follows, viz: State of Illinois, Cook county, ss.

The city of Chicago vs. (here describe the weapon or weapons by general description).

To (—— here name the person accused, or who shall have been convicted as aforesaid) and all other persons interested.

interested.

interested.

You are hereby commanded to appear before me, at my office in Chicago, No. — street (which day shall not be less than ten nor more than thirty days from the date of such writ), at the hour of —a. m. or p. m., and show cause, if any you have, why the weapon described in the caption hereof shall not be confiscated to the city of Chicago, in accordance with the provisions of an ordinance concerning the carrying of concealed weapons, and the confiscation of such weapons, —, constable, or any other constable of said county, is hereby commanded to cause due service of this writ to be made, copies thereof to be duly posted, and to make due return of this writ as required by law; and also to seize and hold the said weapons until it shall be adjudged whether or not the same shall be confiscated to the said city of Chicago. Given under my hand and seal this —day of —, A.

D.——SEC. 6. The officer receiving said writ shall cause one copy of said writ to be posted, for at least five days prior to the day therein mentioned for the hearing, at the Court House door of said city, one copy at the office of the justice or officer issuing said writ, and a like copy at two other public places in said city. He shall serve the person in such writ named, by leaving one copy thereof with such person or persons, and reading the same to such person or persons at least five days before the day fixed for such hearing, and shall make due return of such writ.

writ.

SEC. 7. Upon the return of any such writ, duly served in accordance with the preceding section, the officer issuing the same shall proceed, at the time designated in said writ, to the hearing of the cause, and shall hear all persons who may desire to be heard, touching the matter; and if, upon such hearing, such magistrate or justice of the peace shall find that such weapon or weapons shall have been worn or carried in violation of section one of this ordinance, he shall enter an order that the same be confiscated to the city of Chicago, and that the same be confiscated to the city of Chicago, and that the same be delivered to the officer known as the custodian of stolen property for safe keeping.

SEC. 8. Any person who shall be adjudged to have violated any of the provisions of section one of this ordinance shall pay a fine not exceeding one hundred dollars, or be imprisoned in the House of Correction for a term not exceeding six months, or both, in the discretion of the magistrate or court before whom such conviction shall be had.

shall be had.

Sec. 9. The prohibitions of this ordinance shall not apply to the officers or members of the police force of said city, when on duty.

Sec. 10. This ordinance shall be in force from and after its passage and due publication.

An engrossed ordinance concerning the Mutual Gas Light Company.

Ald. G. Powell moved that the ordinance be passed.

Ald. Daggy moved to amend the ordinance by striking out all after the enacting clause, and insert sections one, two, three, four, five, six, and seven of the ordinance recommended by the minority of the Committee on Gas Lights, as found on pages 267 and 268 of the printed Council proceedings. eddings.
Ald, Schintz moved as an amendment to the amendment

Ald. Schintz moved as an amendment to the amendment the following:

Provided, however, that said corporation furnish gas to the city of Chicago and to its inhabitants at a rate at least 50 cents less per cubic feet than the present rates charged by the present gas companies.

After debate,
Ald. Trucey called for the previous question, and the call was sustained.

The question being on the amendment offered by Ald. Daggy, the ayes and nocs were called, and the amendment lost by the following vote: